

Pycnogonids (Sea spiders): lists of the littoral and shallow water species of Victoria and King Island

David A Staples

Museum Victoria, GPO Box 666, Melbourne, Victoria 3001. Email: dstaples@museum.vic.gov.au

This note is based on the pycnogonid collections made by members of the Marine Research Group (MRG) of the Field Naturalists Club of Victoria and its predecessors (the Underwater Research Group and the Marine Studies Group of Victoria). Records date back to the late 1940s and includes specimens gathered by current and former members, in many cases independently of Group activities.

Most records have been collected anonymously under the umbrella of the MRG. Records are derived from field research along the entire Victorian coastline including bays, inlets and estuaries. As for almost all invertebrate groups the Ninety Mile Beach is devoid of coastal records. The collection represents species found in the low-intertidal zone, sometimes in tidal pools but mostly in knee-deep water immediately adjacent to the exposed coast. Most specimens found in the intertidal zone are small; their size enabling them to shelter in damp areas beneath rocks, algal mats and in crevices mainly in association with algae, polychaete worms, anemones and encrusting bryozoans. Only three species recorded, *Ammonothea australiensis* Flynn, 1919, *Ammonothea biunguiculata* (Dohrn, 1881) and *Pycnogonum aurilineatum* Flynn, 1919 are consistently recorded from the true intertidal zone but these are also well known from local shallow waters. Many of those species collected from near-shore are also found in deeper water, typically associated with sponge surfaces, soft bryozoans and hydroids. Collections by Group members are invariably supported by excellent data that provide a solid basis on which to focus further ecological research into this neglected group.

These records also include species collected on the King Island expedition in March 1980 (marked 'K' on the list) and the Southern Port Phillip Survey (1986–1993) replicating the work of J Bracebridge Wilson a century earlier. Species recorded from King Island are also represented along the Victorian coastline. Because the Southern Port Phillip Survey collection was sampled from deeper water using both naturalist dredge and SCUBA, this material is listed separately.

Each species record may consist of multiple specimens. Of the 47 species recorded, 17 are either new or undescribed.

Acknowledgements

Without detracting from the magnificent contribution by individual members to our knowledge of the Victorian pycnogonid fauna, I am sure no one will take exception to my acknowledging the outstanding contribution by Clarrie Handreck. Clarrie's enthusiasm and dedication to the task of expanding our knowledge of the Victorian coastal fauna was nothing short of extraordinary.

Reference

Staples DA (1997) Sea Spiders or Pycnogonida (Phylum Arthropoda). In *Marine Invertebrates of Southern Australia. Part 111*, pp. 1040–1072, Eds SA Shepherd and M Davies (South Australian Research and Development Institute (Aquatic Sciences): Adelaide)

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Appendix 1. Littoral and shallow-water pycnogonids of Victoria and King Island (K)

AMMOTHEIDAE (13 species, 5 new).

- Achelia assimilis* (Haswell, 1885). 15 records.
Achelia shepherdii Stock, 1973. 23 records.
Achelia sp. nov. 'C'. (K) 22 records.
Achelia sp. nov. 'F'. 1 record.
Achelia transfugoides Stock, 1973. 1 record.
Ammothea ovatooides Stock, 1973. 5 records.
Ammothea australiensis Flynn, 1919. (K) 74 records.
Ammothella biunguiculata (Dohrn, 1881). 8 records.
Ammothella cf. *stauromata* Child, 1982. 1 record.
Ammothella sp. nov. 'A'. 1 record.
Ammothella sp. nov. 'B'. 4 records.
Nymphopsis bathursti Williams, 1940. 26 records.
Nymphopsis sp. nov. 'B'. 4 records.

ASCORHYNCHIDAE (2 species)

- Ascorhynchus compactus* Clark, 1963. (K) 5 records.
Ascorhynchus longicollis (Haswell, 1885). 2 records.

NYMPHONIDAE (3 species, 2 new)

- Nymphon aequidigitatum* Haswell, 1885. 13 records.
Nymphon sp. nov. 'A'. 1 record.
Nymphon sp. nov. 'C'. 5 records.

CALLIPALLENIDAE (16 species, 5 new)

- Anoropallene* sp. nov. 3 records.
Callipallene emaciata (Dohrn, 1881). 2 records.
Callipallene emaciata unnamed sub. sp. Stock, 1954. 5 records.
Cheilopallene sp. nov. 2 records.
Pallenoides sp. nov. 1 record.
Parapallene australiensis (Hoek, 1881). 1 record.
Parapallene sp. nov. 2 records.
Propallene vagus Staples, 1979. 15 records.
Pseudopallene sp. nov. 'A'. 5 records.
Pseudopallene pachycheira (Haswell, 1885). 1 record.
Pseudopallene spp. Unidentified juveniles. 2 records.
Pseudopallene watsonae Staples, 2004. 1 record.
Pycnothea flynni Williams, 1940. 5 records.
Stylopallene cheilorhynchus Clark, 1963. 3 records.
Stylopallene dorsospinum Clark, 1963. 1 record.
Stylopallene longicauda Stock, 1973. 1 record.

PYCNOGONIDAE (1 species)

- Pycnogonum aurilineatum* Flynn, 1919. 11 records.

PALLENOPSIDAE (1 species)

- Pallenopsis macneilli* Clark, 1963. (K) 20 records.



Fig. 1. *Ammothea australiensis* Flynn, 1919. West Head, Flinders. Found on underside of rock on reef flat at low water. Photo by John Chuk. Leg span to about 20 mm. Most often a pale-straw colour but variable. Typically recorded from under boulders and protected crevices. There is a particularly strong association with the polychaete worm *Galeolaria* on which it has been observed feeding but also recorded from algal sortings and sievings. Australian distribution: Garden Island W.A. to Port Jackson N.S.W. and Tasmania.

Appendix 1. (Cont.) Littoral and shallow-water pycnogonids of Victoria and King Island (K)

PHOXICHILIIDAE (4 species, 2 new)

Anoplodactylus evansi Clark, 1963. 25 records.

Anoplodactylus cf. *pycnosoma* (Helfer, 1938). 16 records.

Anoplodactylus sp. nov. 'B'. 1 record.

Anoplodactylus sp. nov. 'C'. 2 records.

Anoplodactylus juvenile. Undetermined species (1 record)

Appendix 2. Southern Port Phillip Survey

AMMOTHEIDAE (6 species)

Achelia assimilis. (Haswell, 1885). 3 records.

Achelia shepherdii Stock, 1973. 1 record.

Ammothea ovatoides Stock, 1973. 8 records.

Tanystylum cf. *orbiculare* Wilson, 1878. 1 record.

Nymphopsis bathursti Williams, 1940. 1 record.

Nymphopsis sp. nov. 2 records.



Fig. 2. *Nymphon aequidigitatum* Haswell, 1884. Kitty Millar Bay, Phillip Island. Collected from underside of intertidal rock at low water. Photo by John Chuk. Leg span to about 40 mm. This species can be locally common, often found in isolated populations. Colour varies from almost clear to yellowish orange. Eggs are of a similar colour. Found intertidally beneath rocks but more commonly subtidally on hydroroids and algae. Australian distribution: Gulf St Vincent S.A. to Cape Byron N.S.W. and Tasmania.

Appendix 2. (Cont.) Southern Port Phillip Survey

ASCORHYNCHIDAE (1 species)

Ascorhynchus longicollis (Haswell, 1885). 4 records.

CALLIPALLENIDAE (9 species, 3 new)

Callipallene emaciata (Dohrn, 1881). 4 records.

Callipallene sp. nov. 'A'. 1 record.

Callipallene sp. nov. 'B'. 2 records.

Cheilopallene sp. nov. 'A'. 1 record.

Parapallene obtusirostris Clark, 1963. 3 records.

Parapallene avida Stock, 1973. 2 records.

Pseudopallene (unidentified protonymphon) 4 records.

Stylopallene cheilorhynchus Clark, 1963. 2 records.

NYMPHONIDAE (1 species)

Nymphon singulare Stock, 1954. 1 record.

PYCNOGONIDAE (1 species)

Pycnogonum carinatum Staples, 2002. 4 records.